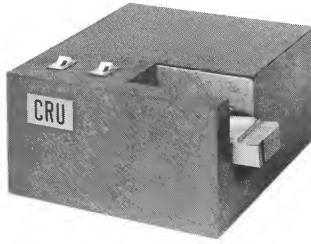


DIGITAL ELECTRONIC MACHINES, INC.



CRU CARD READ UNIT

CRU — TTY

The CRU — Card Reader Unit, has been developed by Digital Electronic Machines, Inc. to satisfy a need in the communications and data processing fields for a low cost, versatile and highly reliable card input unit. The CRU reads a deck of 500 tab cards and converts their content to any 5, 6, 7 or 8 level output code in a character serial-bit parallel or character serial-bit serial fashion. The reading speed is dictated by the equipment to which the CRU is connected.

STANDARD FEATURES

- 1 — Speed — 1000 characters/min.
- 2 — Hopper Capacity — 500 cards
- 3 — On-Off switch
- 4 — Card Feed Switch
- 5 — Hinged Reader Housing —
Exposes Card Feed Surfaces
- 6 — Size—Height — 6.5" Width 12" Length 14"
- 7 — Card end Code
- 8 — Input — Output Code Conversion

OPTIONAL FEATURES

- 1 — Larger Hopper Capacity —
Note: increases unit height
- 2 — Single Card Feed
- 3 — Card Counter
- 4 — Card Skip on Code
- 5 — Card Stop on Code
- 6 — Skip Card
(Skips one card on SW Depression)
- 7 — Search for Code — per code
- 8 — Faster Speed Card Feed
- 9 — Card Content
Alphanumeric Monitor Printer
- 10 — Keyboard for Manual Data Insertion

**Call or write for
additional information . . .**

Digital Electronic Machines, Inc.

2130 JEFFERSON
KANSAS CITY, MISSOURI 64108
AREA CODE 816 — 421-3181

The development of the Card Read Unit — Teletypewriter Combination enables present users of teletypewriter equipment to add a punched card input station to expand the TTY — transmitting capabilities. The CRU can be tied directly to both the Model 33 and 35 teletypewriters and operates in the same manner as the Standard Tape Reader of the TTY. This provides a second input to the keyboard, the punch, and the transmission line selectively. Not a single teletypewriter function is sacrificed or impaired, allowing completely standard operation of the TTY when the Card Read Unit is not in use. The CRU can operate completely unattended allowing the transmission of whole decks of cards at normal transmission speeds and normal line cost, requiring only that an operator refill the hopper as the CRU signals "Empty Hopper".

CRU — DATA SET

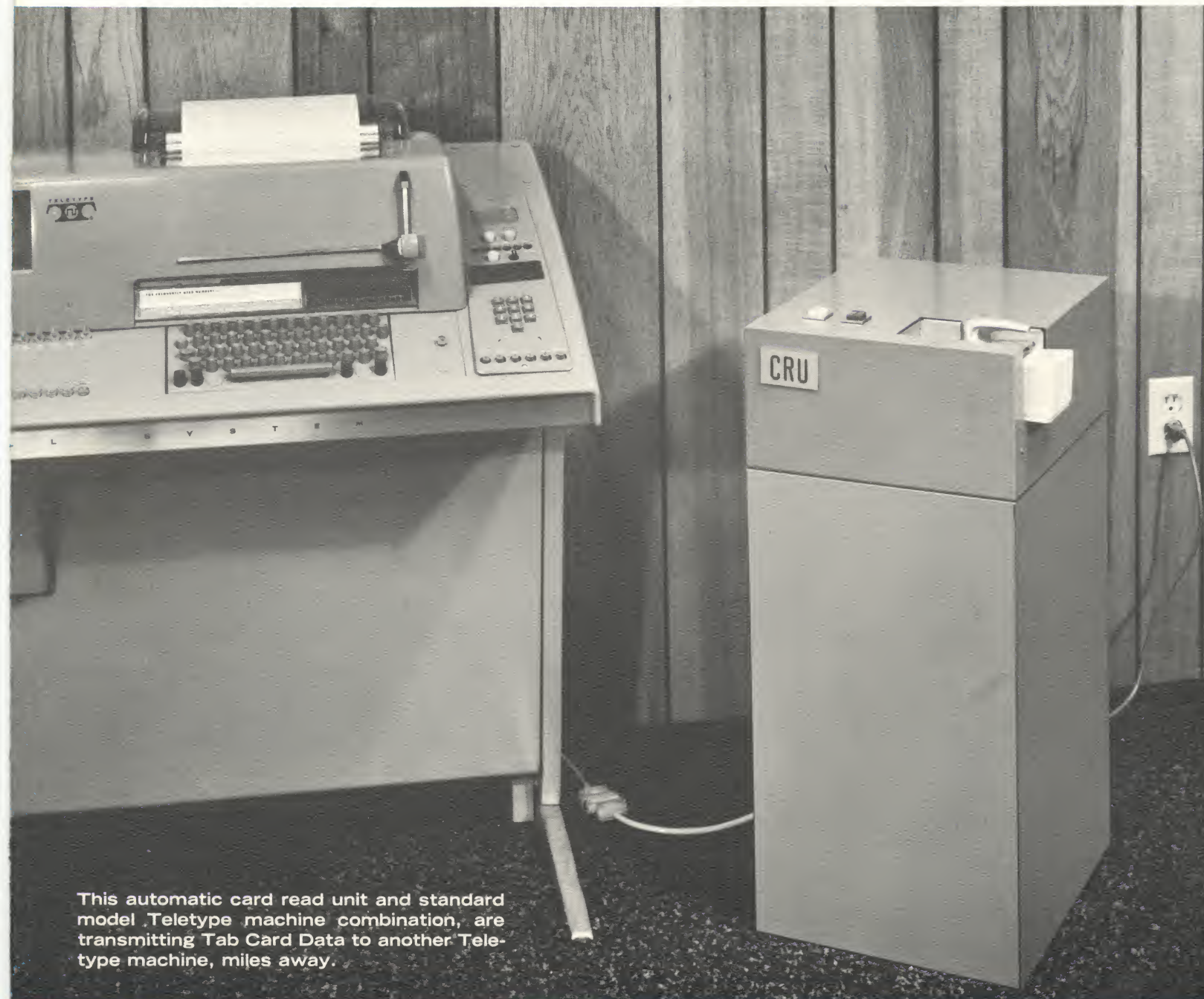
The CRU — To-Digital Transmitting Data Set is available for application to EDP data transmission at high speed. Many areas of communication which require higher speed operation than the standard TTY speed, can be serviced by the higher speed version of the CRU. The card feed mechanism allows for reading and feeding cards at a greater rate of speed than the standard 200 words per minute. The CRU Data Set Combination takes advantage of this higher speed capability of the CRU, and transmits cards at data set speeds.

CRU — DATA COLLECTION

The theory of the CRU, unit record reading concept, also lends itself well to use in the area of data collection. Digital Electronic Machines has designed systems of Multiple Card Read Units for use both as in plant data collection systems and in communications networks feeding data to a centralized computer operation over standard wire transmission lines. When a combination of D.E.M. Standard Products are integrated, a CRU Data Collection System evolves that is a custom engineered system. These systems are designed to satisfy requirements for data collection and transmission.

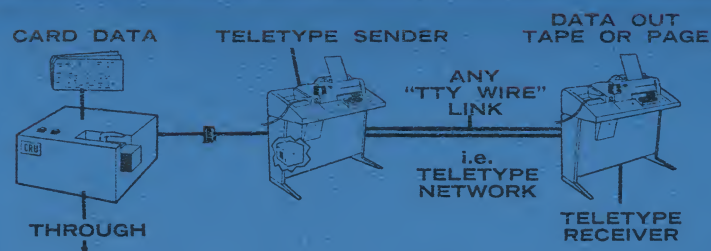
CRU

CARD READ UNIT

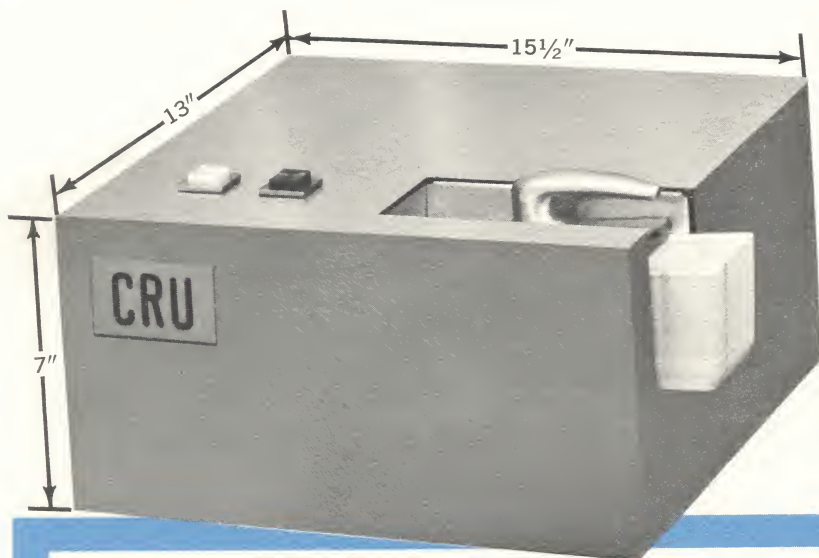


This automatic card read unit and standard model Teletype machine combination, are transmitting Tab Card Data to another Teletype machine, miles away.

DIGITAL ELECTRONIC MACHINES, INC.



Data output is computer compatible punched paper tape, or page copy.



CRU

CARD READ UNIT

STANDARD FEATURES

- 100 words per minute
- Input to output code conversion
- Photoelectric reader with solid state components
- On-off and card feed switches
- Hopper capacity—500 cards
- Card tray, card weight, power and output cables

OPTIONAL FEATURES

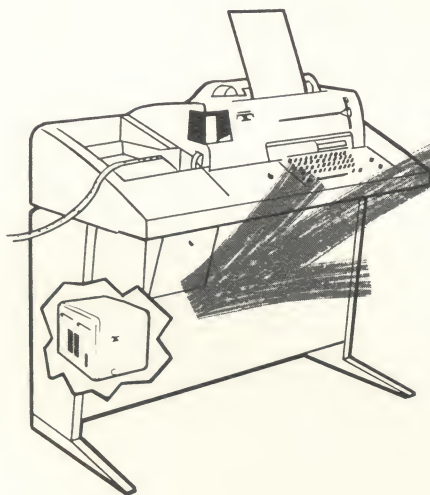
- Automatic carriage return (code output) at end of card and automatic line feed (code output) at beginning of card
- Remote or locally controlled, single card feed
- Card start or stop on external signal
- Card stop on punched code
- Higher card feed speeds (120 cards per minute maximum)
- Additional code conversions (characters or codes)
- Cabinet and stand arrangements
- Parallel to serial converters

The CRU provides a reliable automatic low cost card input unit for versatile application in the fields of data communications, processing and collection. When the CRU is used with standard model Teletype machines the CRU operates in the same manner as the TTY tape reader. This provides a second input to the keyboard, the punch, and the transmission line selectively. No teletypewriter function is sacrificed, allowing completely standard TTY operation. With the CRU, tab card data can be

transmitted over TTY, Telex, Local, DDD, WATS, and leased wire networks.

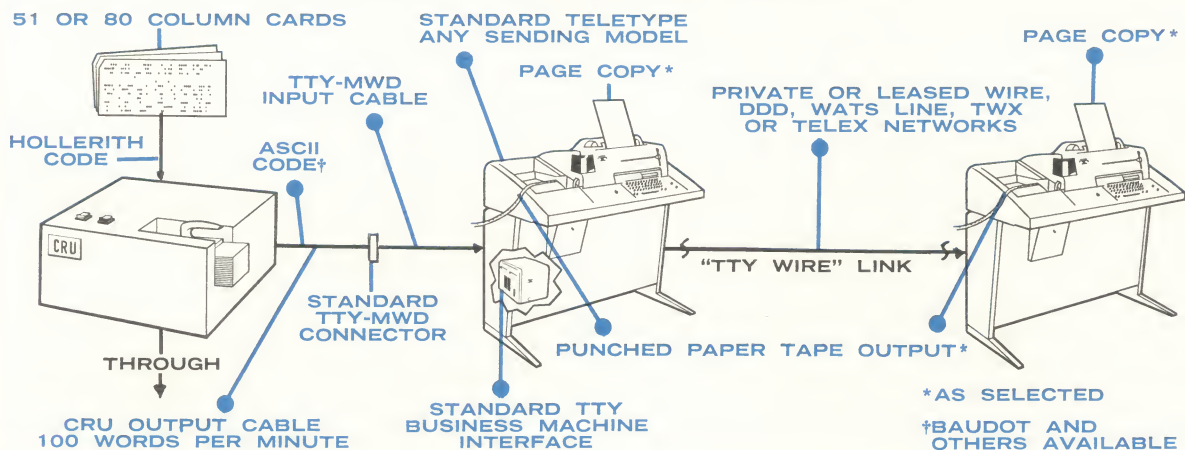
With optional modifications the standard CRU can be used as an input device for computer equipment, billing and accounting machines and numerical process control systems.

The CRU reads 80 or 51 column tab cards and converts their content to any desired 5 to 8 level output code.

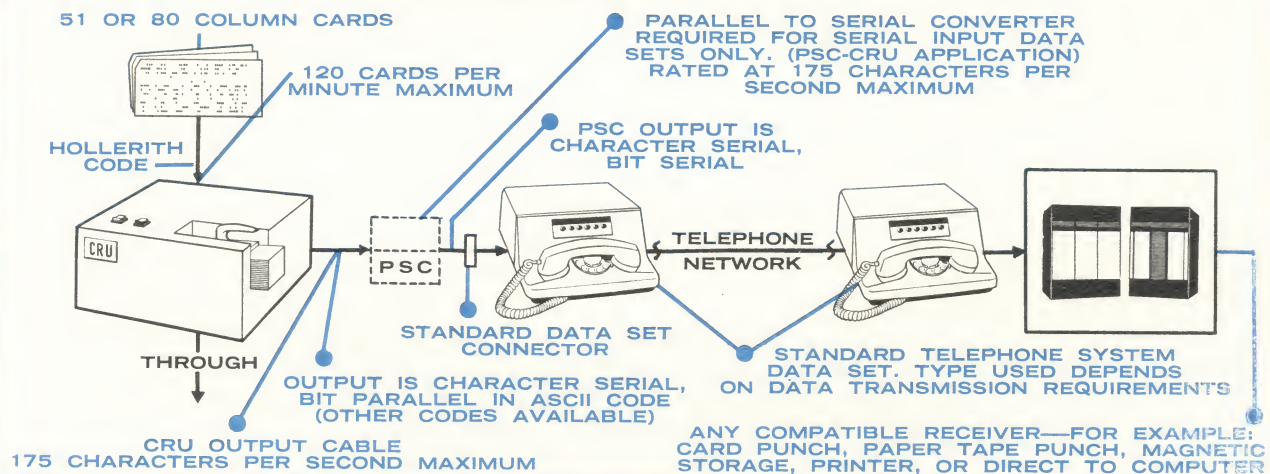


The CRU is attached to standard model Teletype machines through the standard Teletype business machine interface, the Teletype Multiple Wire Distributor. This TTY-MWD is located, out of sight, in the base of the Teletype machine cabinet. All telephone companies provide and install the TTY-MWD. The CRU connects directly to the TTY-MWD through a standard connector. The CRU-MWD-TTY is an approved data communications application.

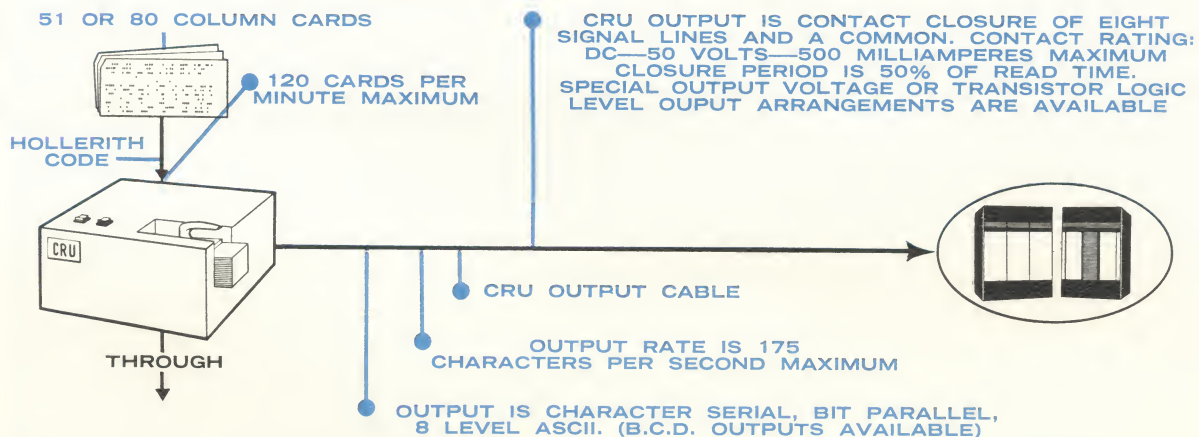
CRU/TELETYPE INTERFACE



CRU/DATA SET INTERFACE



CRU/DIRECT-TO-COMPUTER INTERFACE

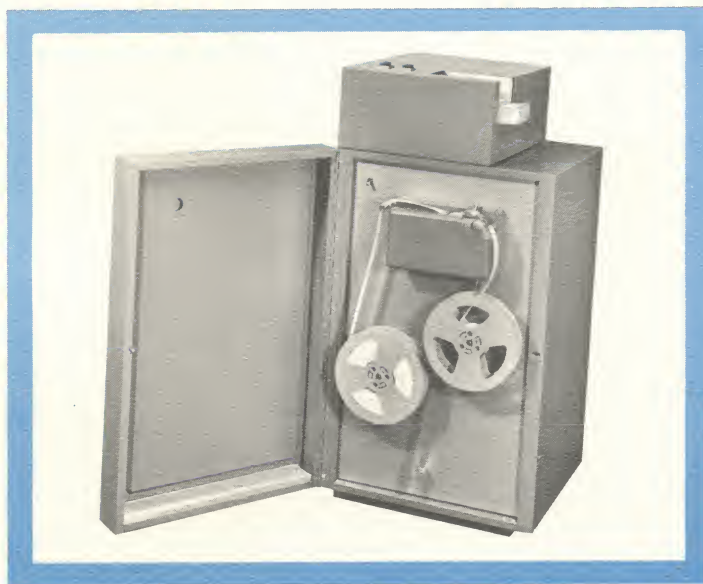


OTHER PRODUCTS



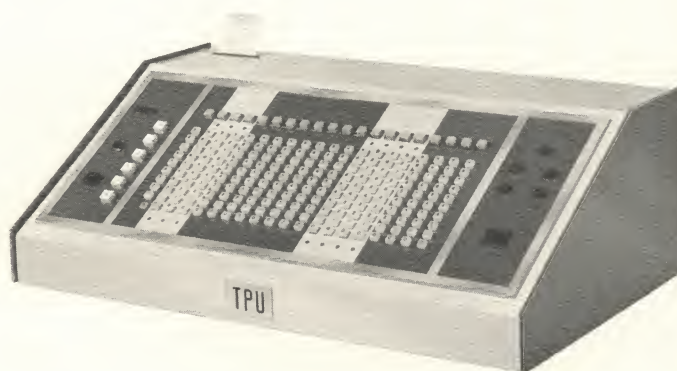
CTU (CARD-TO-TAPE CONVERTER)

Can read standard 80- or 51-column tab cards or edge-punched cards, and transfer their data into punched paper tape for use with computers, business machines, automatic test equipment, automatic control equipment, numerically-controlled machine tools and similar data handling devices. CTU has an automatic hopper feed, can punch any 5 to 8-level code in the output tape, and has a tape punch speed of 1000 characters per minute.



TPU (TAPE PREPARATION UNIT)

Is a self contained data collection unit. Keyboard input is converted to 8 level ASCII (or other) punched paper tape output and/or printed tape listing. Custom constructed with modular units and flexible programming the TPU can meet specific needs economically. Applications include: Gathering data from remote areas in computer comtable form, expiditing sales order entry and branch store reporting, and direct computer entry. Paper tape output can be transmited by TWX or mailed.

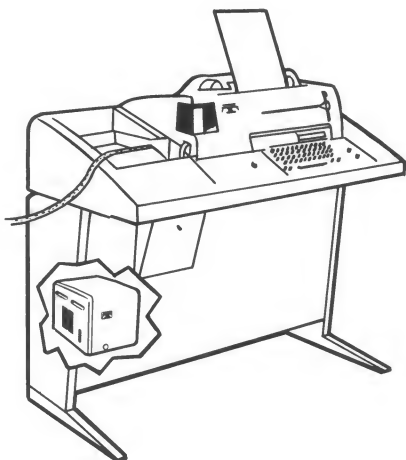


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APPROVED

AN APPROVED DEVICE

The attachment of the CRU to a standard Teletype machine is made through the use of the standard Teletype business machine interface.



This interface, the Teletype Multiple Wire Distributor, is manufactured by the Teletype Corporation and is available nationwide, through any telephone company for about \$20. per month. The CRU connects directly to the TTY-MWD through a standard connector. The TTY-MWD is located, out of sight, in the base of the Teletype machine cabinet. Your telephone company not only approves of this type of application, but encourages greater use of their data communications service.

When the CRU is used with a phone type data set, appropriate provision must be made to adapt the output of the CRU to the input capabilities of the particular data set. The required modifications and additional equipment are available from Digital. This application of the CRU-data set combination is a telephone system approved data set application.



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